## **ABSTRACT**

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A "Burst Ratio" is defined for use as a measure of the burstiness of a packet-based network. One illustrative implementation of the Burst Ratio (R) is where R is equal to the ratio of the average length of observed bursts in a packet arrival sequence over the average length of bursts expected for a random loss packet-based network. Another illustrative implementation of the Burst Ratio (R) is in the context of a 2-state Markov model, wherein  $R = 1/(1+\alpha - \beta)$ , and  $\alpha$  is the probability of losing packet n if packet n-1 was found (i.e., the probability of losing the next packet if the current packet was received) and  $\beta$  represents the probability of losing packet n if packet n-1 was lost (i.e., the probability of losing the next packet was lost).